AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A polyethylene terephthalate-containing polymer formed by polymerizing a mixture comprising:

(a) terephthalic acid or an ester equivalent thereof,

(b) a glycol,

(c) an aliphatic dicarboxylic acid or an ester equivalent thereof, and

(d) a hydroxy terminated polyether polyol; or an aliphatic or an alicyclic diol,

wherein the mixture comprises:

(1) a molar ratio of the glycol and the terepthalic acid of 1 to 3.5;

(2) 2 to 10 weight percent of the aliphatic dicarboxylic acid based on the weight of the polymer; and

(3) the hydroxy terminated polyether polyol in an amount such that the hydroxy terminated polyether polyol is equivalent to 1 to 5 weight percent in the polymer; or

(4) the aliphatic or alicyclic diol in an amount such that the aliphatic or alicyclic diol is equivalent to 1 to 5 weight percent in the polymer.

2. (Previously Presented) A method for making a polyethylene terephthalate-containing polymer comprising:

preparing a mixture comprising a glycol and terephthalic acid or an ester equivalent thereof, wherein the mixture further comprises an aliphatic dicarboxylic acid;

charging the mixture in a reactor;

esterifying the mixture under nitrogen pressure

adding a hydroxyl terminated polyether polyol, to the mixture; and

carrying out a polycondensation reaction,

wherein the polymer is formed in a continuous polymer fiber manufacturing process.

3. (Previously Presented) A method for making a polyethylene terephthalate-containing polymer comprising:

polymerizing a mixture comprising an aliphatic dicarboxylic acid in an amount of 2 to 10-weight percent based on the weight of the polymer, a glycol and terephthalic acid or an ester equivalent thereof

injecting 1 to 4-weight percent of a hydroxy terminated polyether polyol based on the weight of the polymer into the mixture;

obtaining a poly(alkylene dicarboxylate)-containing pre-polymer; and

removing excess glycol from the mixture.

4. (Previously Presented) The method as claimed in claim 2, wherein the said method is a continuous or batch polymerization method.

5. (Previously Presented) The polymer as claimed in claim 1, wherein said aliphatic dicarboxylic acid is selected from the group consisting of adipic acid, sebacic acid, and azelaic acid.

6. (Previously Presented) The polymer as claimed in claim 1, wherein the hydroxy terminated polyether polyol or the aliphatic or alicyclic diol is selected from the group consisting of polyethylene glycol (PEG), Monoethylene glycol (MEG), and polypropylene glycol (PPG).

7. (Previously Presented) A filament comprising said polymer of claim 1.

8. (Original) The filament as claimed in claim 7, wherein said filament is dyed with dispersed dye without dye carrier to have a dye index greater than 100.

9. (Previously Presented) The filament as claimed in claim 7, wherein said dye index of said dyed filament is at least about 120-600.

10. (Previously Presented) The filament as claimed in claim 7, wherein a controlled shrinkage of said filament is 6 to 10 %.

11. (Previously Presented) A yarn comprising said filaments as claimed in claim 7, wherein said yarn is POY or FDY.

12. (Original) The yarn as claimed in claim 11, wherein said yarn is optionally texturised to obtain DTY or FTTY.

13. (Previously Presented) The yarn as claimed in claim 11, wherein said yarn is dyed with a dispersed dye without dye carrier at 100°C to have a dye index greater than 100.

14. (Previously Presented) The yarn as claimed in claim 11, wherein said dye index of said dyed yarn is at least about 120-600.

15. (Previously Presented) The yarn as claimed in claim 11, wherein said yarn has a controlled shrinkage of 6 to 10%.

16. (Previously Presented) A staple fiber comprising said polymer of claim 1.

17. (Original) The staple fiber as claimed in claim 16 wherein said staple fiber is dyed with a dispersed dye without dye carrier at 100°C to have a dye index greater than 100.

18. (Previously Presented) The staple fiber as claimed in claim 16 wherein said dye index of said dyed yarn is at least about 120-600.

19. (Previously Presented) The staple fiber as claimed in claim 16, wherein said yarn has a controlled shrinkage of 6 to 10%.

20. (Previously Presented) A yarn comprising staple fibers as claimed in claim 16.

21. (Original) The yarn as claimed in claim 20, wherein said yarn is dyed with a dispersed dye without dye carrier at 100°C to have a dye index greater than 100.

22. (Previously Presented) The yarn as claimed in claim 20, wherein said dye index of said dyed yarn is at least about 120-600.

23. (Previously Presented) The yarn as claimed in claim 20, wherein said yarn has a controlled shrinkage of 6 to 10%.

24. (Previously Presented) The yarn as claimed in claim 11, wherein said yarn is used to produce woven or knitted fabric.

25. (Previously Presented) A woven or knitted fabric comprising yarn as claimed in claim 11.

26. (Original) The fabric as claimed in claim 25, wherein said fabric is dyed with disperse dye without carrier to have a dye index greater than 100 and 6 to 10% controlled shrinkage.

27. (Canceled)

28. (Previously Presented) The method of claim 2, wherein the glycol and the terephthalic acid or the ester equivalent thereof is in a molar ratio of 1 to 3.5, further wherein the mixture comprises 2 to 10 weight percent the aliphatic dicarboxylic acid based on the weight of the polymer and 1 to 5 weight % of the hydroxyl terminated polyether polyol based on the weight of the polymer.